

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strike through~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1 and 4 in accordance with the following:

1. (Currently Amended) A defrosting method of a refrigerator comprising the steps of:
determining whether or not a predetermined first defrosting completion condition is usable;
if the predetermined first defrosting completion condition is usable, executing a first defrosting mode, which uses the predetermined first defrosting completion condition; and
if the predetermined first defrosting completion condition is not usable, executing a second defrosting mode, which uses a predetermined second defrosting completion condition different from the predetermined first defrosting completion condition, and a defrosting execution determination condition different from that of the first defrosting mode;
wherein the first and second defrosting mode comprise a defrost heater adapted to defrost the heat exchanger.

2. (Original) The defrosting method according to claim 1, wherein the determination of whether or not the predetermined first defrosting completion condition is usable is made, based on whether a heat exchanger temperature sensor adapted to measure a temperature of a heat exchanger, to be defrosted, is in a normal state or in a failure state.

3. (Original) The defrosting method according to claim 2, wherein:
the first defrosting mode is executed when it is determined that the heat exchanger temperature sensor is in the normal state; and
the second defrosting mode is executed when it is determined that the heat exchanger temperature sensor is in the failure state.

4. (Currently Amended) A~~The~~ defrosting method according to ~~claim 3~~, of a refrigerator comprising the steps of:

determining whether or not a predetermined first defrosting completion condition is usable;
if the predetermined first defrosting completion condition is usable, executing a first defrosting mode, which uses the predetermined first defrosting completion condition; and

if the predetermined first defrosting completion condition is not usable, executing a second defrosting mode, which uses a predetermined second defrosting completion condition different from the predetermined first defrosting completion condition, and a defrosting execution determination condition different from that of the first defrosting mode.

wherein the determination of whether or not the predetermined first defrosting completion condition is usable is made, based on whether a heat exchanger temperature sensor adapted to measure a temperature of a heat exchanger, to be defrosted, is in a normal state or in a failure state;

wherein the first defrosting mode is executed when it is determined that the heat exchanger temperature sensor is in the normal state and the second defrosting mode is executed when it is determined that the heat exchanger temperature sensor is in the failure state;

wherein the step of executing the second defrosting mode comprises the steps of:

comparing a temperature of a storage compartment, to be cooled in accordance with an operation of the heat exchanger, with a reference temperature; and

if the temperature of the storage compartment is lower than the reference temperature, turning on a defrost heater adapted to defrost the heat exchanger for a predetermined time.

5. (Original) The defrosting method according to claim 4, wherein the step of executing the second defrosting mode further comprises the step of:

if the temperature of the storage compartment is not lower than the reference temperature, preventing the defrost heater from being driven.

6. (Original) The defrosting method according to claim 4, wherein the second defrosting completion condition is satisfied when a predetermined time has elapsed after the turning-on of the defrost heater.

7. (Original) The defrosting method according to claim 3, wherein:

the first defrosting completion condition is satisfied when the temperature measured by the heat exchanger temperature sensor reaches a reference temperature; and

the first defrosting mode is adapted to execute a defrosting operation in accordance with the first defrosting completion condition.

8. (Original) A defrosting method of a refrigerator comprising the steps of:

determining whether or not a heat exchanger temperature sensor adapted to measure a temperature of a heat exchanger, to be defrosted, is in a failure state;

if the heat exchanger temperature sensor is in a failure state, comparing a temperature of a storage compartment, to be cooled in accordance with an operation of the heat exchanger, with a reference temperature; and

if the temperature of the storage compartment is lower than the reference temperature, turning on a defrost heater adapted to defrost the heat exchanger for a predetermined time.

9. (Original) The defrosting method according to claim 8, further comprising the step of:

if the temperature of the storage compartment is not lower than the reference temperature, preventing the defrost heater from being driven.

10. (Original) The defrosting method according to claim 8, wherein the failure state of the heat exchanger temperature sensor corresponds to an open-circuited or short-circuited state.

11. (Original) A refrigerator comprising:

a heat exchanger adapted to exchange heat with air in a storage compartment;

a heat exchanger temperature sensor adapted to measure a temperature of the heat exchanger;

a defrost heater adapted to perform a defrosting operation for the heat exchanger; and

a control unit adapted to execute a first defrosting mode when the heat exchanger temperature sensor is in a normal state, while executing a second defrosting mode, which uses a defrosting completion condition and a defrosting execution determination condition different from those of the first defrosting mode, when the heat exchanger temperature sensor is in a failure state.

12. (Original) The refrigerator according to claim 11, wherein:

the first defrosting mode is executed to drive the defrost heater until the temperature measured by the heat exchanger temperature sensor reaches a first reference temperature; and

the second defrosting mode is executed to drive the defrost heater for a predetermined time when a temperature of the storage compartment is not higher than a second reference temperature.